

Application No. 10/737,350
Supplemental Response of January 5, 2007

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Conclusions begin on page 6 of this paper.

AMENDMENTS TO THE SPECIFICATION

Please delete the paragraph on page 19, lines 7-17 of the application, and replace it with the following paragraph.

In particular, this application incorporates the following patent applications by reference in their entirety: U.S.S.N. 60/433,480, filed Dec. 13, 2002 and entitled "Vimentin Detection-Based Methods for Diagnosing and Treating Damaged Cells, Neoplastic Cells and Multidrug Resistance;" U.S.S.N. 60/433,351, filed Dec. 13, 2002 and entitled "Nucleophosmin Detection-Based Methods for Diagnosing and Treating Damaged Cells, Neoplastic Cells and Multidrug Resistance", as well as U.S.S.N. 10/736,889 ~~YY/XXXXXX~~, filed Dec. 15, 2003 and entitled "Vimentin Directed Diagnostics and Therapeutics for Multidrug Resistant Neoplastic Disease;" and U.S.S.N. 60/438,012, filed Jan. 1, 2003 and entitled "HSC70 Detection-Based Methods for Diagnosing and Treating Damaged Cells, Neoplastic Cells and Multidrug Resistance," as well as U.S.S.N. 10/737,712 ~~YY/XXXXXX~~, filed Dec. 15, 2003 and entitled "Diagnostics and Therapeutics ~~Therapeutics and Diagnostics~~ for Multidrug Resistant Neoplastic Disease."

Please delete the paragraph on page 76, lines 13-27 of the application, and replace it with the following paragraph.

Examples of pathway-responsive promoters useful in the practice of the present invention include synthetic insulin pathway-responsive promoters containing the consensus insulin binding sequence (Jacob, et al. (1995) J. Biol. Chem. 270:27773-27779), the cytokine pathway-responsive promoter, the glucocorticoid pathway-responsive promoter (Lange, et al. (1992) J Biol. Chem. 267:15673-80), IL1 and IL6 pathway-responsive promoters (Won K.-A and Baumann H. (1990) Mol. Cell. Biol. 10: 3965-3978), T3 pathway-responsive promoters, thyroid hormone pathway-responsive promoters containing the consensus motif, the TPA pathway-responsive promoters (TREs), TGF-beta pathway-responsive promoters (as described in Grotendorst, et al. (1996) Cell Growth and Differentiation 7: 469-480). Additionally, natural or synthetic E2F pathway responsive promoters may be used. An example of an E2F pathway responsive promoter is described in Parr, et al. (1997) Nature Medicine 3:1145-1149) which describes an E2F-1 promoter containing 4 E2F binding sites and is reportedly active in tumor

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cells with rapid cycling. Examples of other pathway-responsive promoters are well known in the art and can be identified in the Database of Transcription Regulatory Regions on Eukaryotic Genomes accessible through the internet at world wide web eimb.rssi.ru/TRRD
http://www.eimb.rssi.ru/TRRD.

Please delete the paragraph on page 90, lines 17-25 of the application, and replace it with the following paragraph.

Another method for determining antigenicity of a polypeptide subsequence is the algorithm of Hopp and Woods ((1981) Proc. Natl. Acad. Sci. 86: 152-6). There are publicly available web sites for Hopp and Woods algorithm analysis of a user-input polypeptide sequence and convenient graphical output of the resulting analysis (see, e.g., hypertext transfer protocol http://hometown.aol.com/_ht_a/lucatoledo/myhomepage/JaMBW/3/1/7/). Using this algorithm to analyze the full-length human HSC70 sequence shown in Figure 14A, several suitable sequences having a high Hopp and Woods antigenic index of an adequate length for immunogenicity were revealed. These include HSC70 amino acid residues: 240-260 (i.e. HFIAEFKRKHKKDISENKRAY); and 480-500 (i.e., IDANGILNVSAVDKSTGKENK).